

9. An antenna assembly as claimed in claim 1, wherein the assembly further comprises a relatively rigid base portion for connecting the assembly to the handheld telecommunication apparatus.

22. A method of producing an antenna assembly comprising the steps of:

arranging a planar antenna element to be disposed on a substrate; and

encapsulating the planar antenna element within a flexible member by means of an injection moulding process.

23. A method as claimed in claim 22 wherein the flexible member is produced by moulding operations performed on opposing sides of the substrate.

53. A method as claimed in claim 24, wherein holes are provided through the substrate inside the circumference of the substrate.

54. A method as claimed in claim 53, wherein cohesive bonding between the moulding on each side occurs through said holes.

55. A method as claimed in claim 24, wherein the substrate is made of transparent polyester and the moulding on each side has a non-uniform thickness of a thermo plastic elastomer.

56. A method as claimed in claim 55, wherein the temperature of the thermo plastic elastomer is controlled during the injection moulding process to avoid damage to the polyester substrate.

Claim 57
Canc'd

57. A handheld telecommunication apparatus comprising:
a planar antenna disposed on a substrate; and
a flexible member encapsulating the planar antenna and the substrate, said flexible member arranged to protrude from a surface of the handheld telecommunication apparatus.

58. A handheld telecommunication apparatus as claimed in claim 57, wherein said flexible member includes moulding on each side of said substrate, said moulding extending beyond the outer edge of said substrate.